5

10

15

What is Claimed is:

1. A fuel cell comprising:

electrolyte;

an anode and a cathode at opposite sides of the electrolyte;

an anode side separator and a cathode side separator at outer sides of the anode and the cathode, respectively; and

a medium layer between the cathode and the cathode side separator for prevention of corrosion of the cathode side separator.

- 2. The fuel cell as claimed in claim 1, wherein the medium layer is a coated layer on the cathode.
- 3. The fuel cell as claimed in claim 2, wherein the coated layer is formed of a material selected from materials having ionization tendencies similar to the cathode.

4. The fuel cell as claimed in claim 2 or 3, wherein the cathode includes a Pt catalyst, and the medium layer is formed of gold.

5. The fuel cell as claimed in claim 1 or 2, further comprising a medium layer between the anode and the anode side separator for prevention of corrosion of the anode side separator.

6. A fuel cell comprising:

electrolyte;

an anode and a cathode at opposite sides of the electrolyte;

20

5

10

15

20

- an anode side separator at an outer side of the anode;
- a cathode side separator at an outer side of the cathode;
- a porous supporting member between the cathode and the cathode side separator for supporting the cathode; and
- a supporting member medium layer between the cathode and the porous supporting member for prevention of corrosion of the porous supporting member.
 - 7. The fuel cell as claimed in claim 6, wherein the supporting member medium layer is a coated layer on the supporting member.
 - 8. The fuel cell as claimed in claim 7, wherein the coated layer is formed of a material selected from materials having ionization tendencies similar to the cathode.
- 9. The fuel cell as claimed in claim 6, further comprising a medium layer between the cathode side separator and the porous supporting member for prevention of corrosion of the cathode side separator.
 - 10. The fuel cell as claimed in one of claims $6 \sim 9$, wherein the cathode includes a Pt catalyst, and the medium layer is formed of gold.
 - 11. The fuel cell as claimed in one of claims $6 \sim 9$, further comprising:
 - a porous supporting member between the anode and the anode side separator for supporting the anode; and
- a supporting member medium layer between the anode and the porous supporting member for prevention of corrosion of the porous supporting member.

5

12. A fuel cell comprising:

electrolyte;

an anode and a cathode at opposite sides of the electrolyte;

an anode side separator and a cathode side separator at outer sides of the anode and the cathode, respectively; and

a medium layer between the anode and the anode side separator for prevention of corrosion of the anode side separator.